

**AIRPORT AUTHORITY  
OF WASHOE COUNTY**

**FINAL REMEDIATION ACTION PLAN  
DECISION DOCUMENT**

**FOR**

**ABANDONED FIRE TRAINING AREAS  
SITES 1 AND 6  
RENO CANNON INTERNATIONAL AIRPORT  
RENO, NEVADA**

**March 15, 1993**

**Prepared by**

**Airport Authority of Washoe County  
Engineering Division  
Reno Cannon International Airport  
Reno, Nevada 89510**

## DECISION DOCUMENT

1. INSTALLATION: Reno Cannon International Airport, Reno Nevada 89510
2. SITE: Abandoned Fire Training Sites 1 and 6, located at Reno Cannon International Airport
3. LOCATION: Reno Cannon International Airport is located in the center of Reno, Nevada. A graphical location of the Reno Cannon International Airport is shown on attached Figure 1. The abandoned fire training areas, Sites 1 and 6 are located as followed. Site 1 is located approximately 600 feet east of Runway 34L and approximately 400 feet north of the old engine runup pad. Site 6 is located in the southeast quadrant of the airport, approximately 2,400 feet east of Runway 34L and 800 feet south of Runway 25. A graphical location of Sites 1 and 6 is shown on Figure 2.

## 4. INTRODUCTION:

### 4.1 Program Objective

The Installation Restoration Program (IRP) is mandated by the Comprehensive Environmental Response Compensation and Liability Act of 1980 (CERCLA), as amended by Superfund Amendments and Reauthorization Act of 1986 (SARA), and, to the extent practicable, the National Oil and Hazardous Substances Pollution Contingency Program (NCP).

The objectives of the IRP are included in the overall objectives of SARA Section 211; they are:

**Identify, investigate, research and develop, and cleanup** contamination from hazardous substances, pollutants, and contaminants.

A fourth primary objective, closeout, is added to those above to emphasize the importance of completing the IRP. Closeout implies that all necessary actions have been taken, documented and accepted by the appropriate authorities. By meeting these objectives, the Airport Authority of Washoe County will protect public health and the environment.

When investigations show that a site may pose a significant threat to public health and the environment, a remedial action alternative is selected and executed.

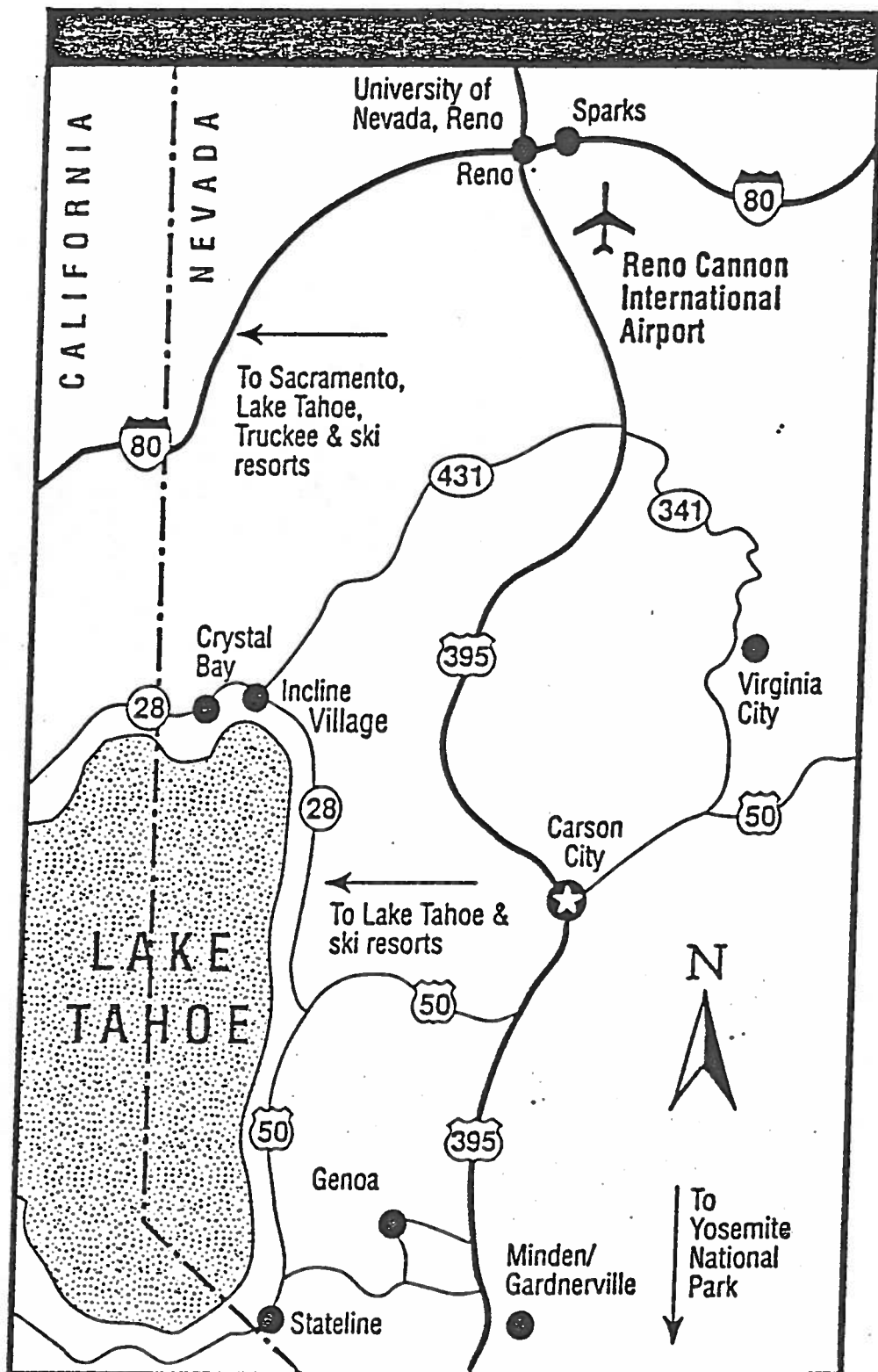
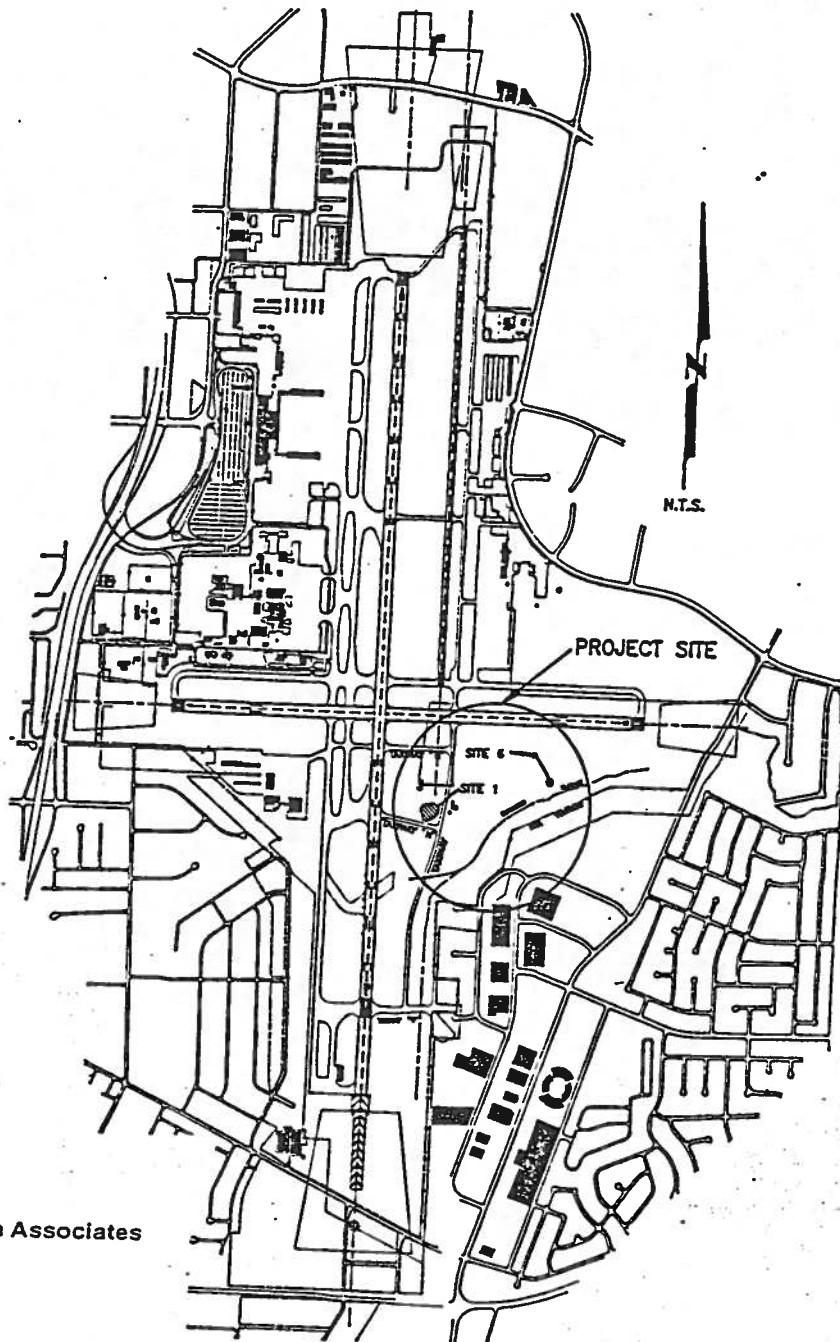


Figure 1. - Location of Airport

**ABANDONED FIRE TRAINING AREAS  
SITES 1 AND 6  
RENO CANNON INTERNATIONAL AIRPORT  
RENO, NEVADA**



**Harding Lawson Associates**  
Engineering and  
Environmental Services

Figure 2. - Location of Abandoned Fire Training Areas

After execution of an alternative, and the site does not pose any threat to public health and safety, the site is closed out under the IRP. A Decision Document is prepared for the site closure to describe the decision-making process and provide a formal record of the decision.

#### 4.2 Statement of Basis

This Decision Document is based on information contained in the following reports. These reports describe the results of investigations and analyze potential impacts to public health and the environment.

- \* Installation Restoration Program, Preliminary Assessment, Nevada Air National Guard, 152nd Tactical Reconnaissance Group (TRG), Reno Cannon International Airport, Reno, Nevada, January 1989
- \* Remedial Action Plan, Abandoned Fire Training Areas, Sites 1 and 6, Reno Cannon International Airport, Reno, Nevada, Harding Lawson Associates, November 30, 1992.

### 5. BACKGROUND

#### 5.1 Environmental Setting

##### 5.1.1 Climate

The climate of the Reno Cannon International Airport is semi-arid. The daily temperatures on the whole are mild, but the differences between high and low often exceed 45 degrees F. The average afternoon high may exceed 90 degrees F while the evening low never reaches above 60 degrees F. Afternoon temperatures in winter are moderate.

More than half of the precipitation in Reno occurs as mixed rain and snow, and falls from December to March. Although there is an average of about 25 inches of snow a year, it seldom remains on the ground for more than three or four days at a time. Summer rain comes mainly as brief thunderstorms in the middle or late afternoons.

Humidity is very low during the summer months, and moderately low during the winter. Fogs are rare, and are usually confined to the early morning hours of midwinter. Sunshine is abundant throughout the year.

#### 5.1.2 Geology

The Airport is located in the Truckee Meadows area, including both Reno and Sparks. Truckee Meadows is a structural basin or graben bounded to the west by the Carson Range and to the east by the Virginia Range. The Carson and Virginia ranges are composed primarily of granitic rocks. There are three major types of Quaternary deposits in the Truckee Meadows:

- \* gravel deposits of the Truckee River;
- \* alluvial fan deposits around the margins of the Truckee Meadows; and
- \* reworked older deposits and relatively fine-grained elastic material deposited throughout the central part of the Truckee Meadows.

The lithologies of these deposits range from clays and silts to very coarse gravel.

Some areas of geothermal activity can be found in the Truckee Meadows. The presence of geothermal activity has a profound effect on water chemistry through hydrothermal alteration of volcanic rocks around and under the Truckee Meadows. Typical of this region are high arsenic levels in the ground water.

The airport is generally level, but slopes gently to the east, with an average base elevation of 4400 feet above mean sea level (MSL).

#### 5.1.3 Hydrology

The Truckee River, the major drainage feature for the Truckee Meadows, generally flows from west to east through the meadows. It is approximately 1.5 miles north of the airport. The Flood Insurance Rate Map (FIRM) of Washoe County indicates that the airport does not lie within a 100-year flood plain.

The surface water hydrology immediately around the airport is characterized by both open and closed channel drainage ditches. Drainage ditches are located along all four sides of the airport. They transport surface water generally towards the east, across the airfield, and into Boynton Slough that feeds

into Steamboat Creek and then on into the Truckee River. The Boynton Slough is closely located to the south of both abandoned fire training sites.

Due to the intertonguing nature of the valley-fill deposits underlying the airport, depth to water-bearing strata vary extensively. Some wells, located approximately 2000 to 3000 feet south of the Airport, tap a zone of water-bearing deposits about 50 to 70 feet below ground surface (bgs). However, it is common for wells located several yards apart to find economically useful producing aquifers at different depths. The water table has been higher in the past, resulting in swampy areas on and around the airfield. Today, most of the swampy area, approximately two miles east-southeast of the Airport, is confined to the area near the confluence of Boynton Slough and Steamboat Creek. Apparently, the airfield was part of an area of discharge for the ground water moving through the Truckee Meadows, but lowering of the local water table has restricted the area of discharge. This lowering of the water table is most likely a result of the current drought and deepening of drainage ditches on and around the airfield.

## 5.2 Site History

Site 1 was in use from 1952 to 1956. This fire training area consisted of a flat, unlined, open earthen area surrounded by a six to ten inch soil berm. A water base was applied to the fire training area prior to the training exercise. The primary fuels burned during the exercises were JP-4, waste oils, "shop waste", and other flammable liquids. An estimated 2,400 gallons of flammable liquids per year were used with an assumed 70% burn rate. Therefore, an estimated 6,500 gallons of flammable liquids could have remained to evaporate or infiltrate into the ground during its 9-year use.

Site 6 was in use from 1975 to September 1985. This 100 foot diameter fire training area consisted of an unlined, open earthen area surrounded by a twelve to eighteen inch soil berm. A water base was applied to the fire training area prior to the training exercise. The primary fuel burned during the exercises was JP-4 except for a one-time burn of 2,000 gallons of toluene. An estimated 57,000 gallons of flammable liquids were used during the 10-year period with an assumed 70% burn rate. Therefore, an estimated 17,000 gallons of flammable liquids could have remained to evaporate or infiltrate into the ground.

## 6. STUDY FINDINGS

### 6.1 Site Analysis

#### 6.1.1 Site 1

Surface soils consisted of stiff to very stiff lean clays ranging in depth from 8.0 to 15.0 feet bgs, underlain by loose to dense sands for the full depth of the shallow borings. A burn layer approximately 1.0 foot thick was encountered at a depth of 0.5 to 1.5 feet bgs at one boring and 2.5 to 3.5 feet bgs at another.

Subsurface soils encountered in a deep lithologic boring consisted of interbedded medium dense to very dense sands and gravel to a depth of 40.5 feet underlain by stiff sandy silt to a depth of 63.0 feet that is believed to be a confining layer. The sandy silt is underlain by very dense sands and stiff silts with cobbles.

Results from soil samples collected from lithologic borings and shallow borings indicate EPA Method 8240 (VOCs) compounds, EPA Method 8270 (SOCs), and EPA Method 8080 (PCBs) were not present at concentrations above their respective detection limits and state action levels at this site. The Nevada state action level for hydrocarbons in soil is a Total Petroleum Hydrocarbon (TPH) concentration of 100 ppm, i.e., generally soils with TPH concentrations above this level require remediation. A concentration of 370 ppm TPH as motor oil was detected in a soil sample collected from the "burn layer". Therefore, it is concluded that hydrocarbon contaminated soils above the state action levels are present over an area of approximately 7,850 square feet, with an average thickness of 0.5 to 1.0 feet at a depth of 1.0 to 2.5 feet below ground surface (bgs).

A concentration of 2.7 ppm arsenic was detected in one of the boring samples. It is known that arsenic naturally occurs at elevated levels in the groundwater in this area.

Ground water was encountered during monitor well drilling at depths ranging from 10 to 15 feet bgs. Once the monitor wells were



installed and developed, depths to the ground water ranged from 2.0 to 5.6 feet bgs indicating that ground water in this area is flowing under artesian conditions. The water surface in Boynton Slough is approximately 8 feet below the adjacent ground surface indicating that it is most likely a ground water discharge location. The ground water flow in this area is to the east with a hydraulic gradient of 0.0025. Ground water samples analyzed for EPA Methods 8015 (Modified) (TPH), 601 (halogenated carbons) and 625 (SOCs) were not present at concentrations above their respective detection limits and well below state action levels. Low levels of benzene, toluene, xylene, and selenium were detected below state action levels. Naturally occurring elevated levels of arsenic was detected in the ground water. Based on the above facts and the results of testing, it is concluded that contaminants detected in the ground water are not present at concentrations above state action levels.

#### 6.1.2 Site 6

Surface soils consisted of stiff to very stiff lean clays and silts and loose to medium dense silty sands ranging in depth from 7.0 to 15.0 feet bgs, underlain by stiff to very stiff silts with and without sand and loose to dense clayey sand for the full depth of the shallow borings.

Subsurface soils encountered in a deep lithologic boring consisted of interbedded medium dense to very dense sands and gravel to a depth of 64.0 feet underlain by very stiff to hard silts with and without gravel and cobbles which is believed to be a confining layer.

Results from soil samples collected from lithologic borings and shallow borings indicate EPA Method 8270 (SOCs), and EPA Method 8080 (PCBs) were not present at concentrations above their respective detection limits and state action levels at this site. Concentrations of TPH as jet fuel, diesel, motor oil, and gasoline was detected ranging from below minimum laboratory detection limits to 3900 ppm. Therefore, it is concluded that hydrocarbon contaminated soils

above the state action levels are present over an area of approximately 5,540 square feet, with an average thickness of 2.5 feet at a depth of 2.5 to 5.5 feet bgs.

A concentration of .061 ppm arsenic was detected in one of the boring samples. It is known that arsenic naturally occurs at elevated levels in the groundwater in this area.

Ground water was encountered during monitor well drilling at depths ranging from 10 to 15 feet bgs. Once the monitor wells were installed and developed, depths to the ground water ranged from 2.0 to 5.6 feet bgs indicating that ground water in this area is flowing under artesian conditions. The water surface in Boynton Slough is approximately 8 feet below the adjacent ground surface indicating that it is most likely a ground water discharge location. The ground water flow in this area is to the southwest with a hydraulic gradient of 0.0010. Ground water samples analyzed for EPA Methods 8015 (Modified) (TPH), 601 (halogenated carbons) and 625 (SOCs) were not present at concentrations above their respective detection limits and state action levels. Low levels of benzene, toluene, xylene, and selenium were detected below state action levels. Naturally occurring elevated levels of arsenic was detected in the ground water. Based on the above facts and the results of testing, it is concluded that contaminants detected in the ground water are not present at concentrations above state action levels.

## 6.2 Environmental and Human Health Risk

Actual or threatened releases of hazardous substances from the soil at Sites 1 and 6, if not addressed by implementing the response action selected in this Record of Decision, may present an imminent and substantial endangerment to the public health, welfare, or the environment.

## 6.3 Remediation Alternatives

Selection of the Soil Remediation Alternatives is based on the following criteria:

- \* Effectiveness

\* Implementability

6.3.1      Alternative 1 - Excavation and Incineration

This process is achieved with the use of earth excavation equipment. Contaminated soils are removed from the site and the excavation is backfilled and compacted with imported clean soil. The contaminated soil is transported to a State-permitted incinerator. As the soil is passed through the incinerator, heat generated by the incinerator breaks the hydrocarbons down into harmless compounds. Incinerated soil is certified clean by the facility which also arranges for final disposal.

The effectiveness of this alternative is very good because the contaminants are permanently destroyed and should have little or no adverse effects on public health and the environment.

This alternative can be easily implemented in the State of Nevada. This alternative is used frequently in the State of Nevada and has a good performance history.

6.3.2      Alternative 2 - Containment

Containment is achieved by placement of an artificial cap over the contaminated site. The cap can be constructed with compacted clayey soil, asphalt, concrete, synthetic membranes or various combinations of these materials. Continued long-term inspection and maintenance are required to protect the integrity of the cap.

The effectiveness of this alternative is not good for this alternative because of the future possible contamination of the ground water. The TPH contained in the soil can still migrate to the ground water beneath the contaminated area thereby, spreading the contamination out beyond the site via the water table. This is a potential hazard to the public health and environment due to the close proximity of the population and airport. Therefore this alternative should not be used.

### 6.3.3 Alternative 3 - Aeration Treatment

Excavated soil is stockpiled on an impermeable liner and left exposed to the atmosphere. Periodically, the soil is tilled with a tractor or similar equipment. Volatile compounds will diffuse through the soil to the atmosphere. Due to the requirements of the Nevada Bureau of Air Quality, it may be necessary to treat the hydrocarbon emissions before releasing to the atmosphere.

The effectiveness of this alternative is not good due to the presents of diesel and oil. Diesel and oil are semi-volatile contaminants and the aeration process is not effective on these contaminants. Therefore this alternative should not be used.

### 6.3.4 Alternative 4 - Biological Treatment

Treatment can be onsite or offsite.

#### Onsite Treatment

Excavated soil is stockpiled on an impermeable liner and left exposed to the atmosphere. Periodically, the soil is tilled with a tractor or similar equipment. Biodegradation of the hydrocarbons into carbon dioxide and water is accomplished by enhancing indigenous microbial activity within the contaminated soil. This is done by adding oxygen, and nutrients to the soil. Water is added to obtain optimum moisture content. Due to the requirements of the Nevada Bureau of Air Quality, it may be necessary to treat the hydrocarbon emissions before releasing to the atmosphere. Also, airport activities are relatively incompatible with this treatment option onsite. Therefore, the onsite option will not be considered.

#### Offsite Treatment

Soil is excavated and transported to a State-permitted facility in Las Vegas. The soil is biologically treated by the facility, certified clean, and disposed of.

The effectiveness of this alternative is good because the contaminants are permanently destroyed and should have little or no adverse effects on public health and the environment.

However, the long distance to the facility (approximately 460 miles) has some small incremental increase in the risk of a spill occurring during transportation.

This alternative can be easily implemented in the State of Nevada.

#### 6.3.5 Alternative 5 - No Action

The no action alternative is usually included in an evaluation of potential remedial action alternatives and in some cases, may be the only feasible remedial alternative.

The no action alternative does not apply to Site 1 because it will have to be removed for the new airport runway.

The no action alternative could apply to Site 6 since it is not involved with the construction of the new runway.

### 7. ALTERNATIVE SELECTION AND SUMMARY

Alternative 5/No Action is not considered a suitable alternative because both sites could be hazardous to public health and the environment.

Alternative 1/Excavation and Incineration has the lowest liability of the remaining alternatives associated with transportation because the sites are relatively close to the incineration facility.

### 8. CONCLUSION

Alternative 1/Excavation and Incineration of hydrocarbon impacted soil at Sites 1 and 6 is the selected alternative based on effectiveness, and implementation.

The selected alternative is protective of human health and the environment, complies with Federal and State requirements that are legally applicable or relevant and appropriate to the remediation action. This remedy utilizes permanent solutions and alternative treatment technology, to the maximum extent practicable, and satisfies the statutory preference for remedies that employ treatment that reduces toxicity, mobility, or volume as a principal element.

Because this remedy will not result in hazardous substances remaining on-site above health-based levels, the five-year review will not apply to this action.

## Technical Document to Support Site Remediation and Closeout

1. INSTALLATION: Reno Cannon International Airport, Reno Nevada  
89510
2. SITE: Abandoned Fire Training Sites 1 and 6, located  
at Reno Cannon International Airport
3. STATEMENT OF BASIS

This remediation and closeout decision is based on information contained in the following reports. These reports describe the results of investigations and analyze potential impacts to public health and the environment.

- \* Installation Restoration Program, Preliminary Assessment, Nevada Air National Guard, 152nd Tactical Reconnaissance Group (TRG), Reno Cannon International Airport, Reno, Nevada, January 1989
- \* Remedial Action Plan, Abandoned Fire Training Areas, Sites 1 and 6, Reno Cannon International Airport, Reno, Nevada, Harding Lawson Associates, November 30, 1992.

### 4. DESCRIPTION OF SELECTED REMEDY

The above reports indicate that fuels used at the sites are still contained within the soil at the sites and can possibly have a potential threat to public health and the environment. The Excavate and Incinerate alternative is the selected remedy for the Abandoned Fire Training Areas, Sites 1 and 6.

### 5. DECLARATIONS

The selected remedy is protective of human health and the environment, complies with Federal and State requirements that are legally applicable or relevant and appropriate to the remediation action. This remedy utilizes permanent solutions and alternative treatment technology, to the maximum extent practicable, and satisfies the statutory preference for remedies that employ treatment that reduces toxicity, mobility, or volume as a principal element.

Because this remedy will not result in hazardous substances remaining on-site above health-based levels, the five-year review will not apply to this action.

AIRPORT AUTHORITY OF WASHOE COUNTY

3/15/93  
Date

By: Robert C. White

Title: Executive Director

NEVADA DEPARTMENT OF  
ENVIRONMENTAL PROTECTION

3/24/93  
Date

By: Paul J. Schubert

Title: Chief, Bureau of Federal Facilities



# Airport Authority of Washoe County

Reno Cannon International Airport  
Reno Stead Airport  
Box 12490  
Reno, NV 89510  
Phone 702/328-6400  
FAX 702/328-6510

RECEIVED  
ENVIRONMENTAL  
PROTECTION

93 MAR 23 PM 12:35

March 18, 1993

State of Nevada  
Department of Conservation and Natural Resources  
Division of Environmental Protection  
Bureau of Federal Facilities  
DOD Branch  
Capital Complex  
333 E. Nye Lane  
Carson City, NV 89710

Attn: Nevan Kane

**Re: Remediation of Abandoned Fire Training Areas, Sites 1 and 6**

Dear Mr. Kane:

Enclosed are laboratory reports obtained from the Washoe County Environmental Health Department. These reports show naturally occurring elevated arsenic levels in ground water of the surrounding areas of the airport.

As always, it's a pleasure working with you. Please phone me at (702) 328-6460 if you have any questions.

Sincerely,

Steve Richard, P.E.  
Civil Engineer

SR:kk  
enclosures  
cc: Rod Savini, P.E., Senior Engineer



468

NEVADA STATE HEALTH LABORATORY  
NEVADA DIVISION OF HEALTH  
1660 N. Virginia Street  
Reno, Nevada 89503  
(702) 789-0335

084468

## WATER CHEMISTRY ANALYSIS:

Attn: Fees may apply to some types of samples.

## TYPE OF ANALYSIS:

- ☐ Check here for ROUTINE DOMESTIC ANALYSIS.  
Circle the constituents needed for PARTIAL ANALYSIS.

## SAMPLING INSTRUCTIONS:

The sample submitted must be representative of the source. Spring and surface water samples should be as free of dirt and debris as possible. Wells should be pumped thoroughly before sampling, changing the water in the casing at least three times. Product water from filters should be sampled after running for about ten (10) minutes.

Sampled by T. WETCH Date 10/24/89  
Owner WESTPAC Phone \_\_\_\_\_  
Address \_\_\_\_\_  
City \_\_\_\_\_ State \_\_\_\_\_

## REPORT TO:

Name WCDHO  
Address \_\_\_\_\_  
City \_\_\_\_\_  
State \_\_\_\_\_ Zip \_\_\_\_\_

All of the information below must be filled in  
or the analysis will not be performed.

State NV County WASHOE  
Township 17 Range 19 Section 20  
General Location MILL ST - RENO  
Source Address MILL & OHM

## REASON FOR ANALYSIS:

- ☐ Loan  
☐ Personal health reasons  
☐ Purchase of the property  
☐ Rental or sale of property  
☐ Subdivision approval  
☒ Other SDWA

## USE OF WATER:

- ☒ Domestic drinking water  
☐ Geothermal  
☐ Industrial or mining  
☐ Irrigation  
☐ Other \_\_\_\_\_  
Initials \_\_\_\_\_

## SOURCE OF WATER:

Filter ☐ Yes ☒ No  
Public ☒ Yes ☐ No  
Spring \_\_\_\_\_  
Well ☒ Depth 563 ft.  
Hot \_\_\_\_\_ Cold ☒  
IN USE ☒ Yes ☐ No  
Type \_\_\_\_\_  
Name \_\_\_\_\_  
Surface \_\_\_\_\_  
Casing diameter 1.9 in.  
Casing depth \_\_\_\_\_ ft.

The results below are representative only of the sample submitted to this laboratory.

## FOR LABORATORY USE ONLY

| FOR LABORATORY USE ONLY |      |             |       |             |          |                                      |      |    |         | PRINT OTHER DESIRED<br>CONSTITUENTS BELOW |  |
|-------------------------|------|-------------|-------|-------------|----------|--------------------------------------|------|----|---------|---|--|
| Constituent             | ppm  | Constituent | ppm   | Constituent | S.U.     | Constituent                          | ppm  |    |         |   |  |
| T.D.S. @<br>103° C.     | 2791 | Chloride    | 22.0  | Iron        | 149.3    | Color                                | 3    | Cd | <0.001  |   |  |
| Hardness                | 281  | Nitrate     | 8     | Manganese   | 0.01     | Turbidity                            | 0.2  | Cr | <0.005  |   |  |
| Calcium                 | 69   | Alkalinity  | 2.1   | Copper      | 0.00     | pH                                   | 8.07 | Ag | <0.005  |   |  |
| Magnesium               | 16   | Bicarbonate | 102   | Zinc        | 0.00     | EC                                   | 436  | Hg | <0.0005 |   |  |
| Sodium                  | 7    | Carbonate   | 124   | Barium      | 0.02     |                                      |      | Pb | <0.005  |   |  |
| Potassium               | 61   | Fluoride    | 0     | Boron       | 0.4      |                                      |      | Se | <0.001  |   |  |
| Sulfate                 | 7    | Arsenic     | 0.066 | Silica      | 47       |                                      |      |    |         |   |  |
| ABAS                    | <0.1 |             |       | GROSS ALPHA | 43 pCi/L | Circled items exceeds the U.S.P.H.S. |      |    |         |   |  |
|                         |      |             |       | GROSS BETA  | 4 pCi/L  | Drinking Water Stds. The limits are: |      |    |         |   |  |

Remarks:

PEZZI Well

11.7.89

Eng 12-1-89

Collected by \_\_\_\_\_  
S.D. \_\_\_\_\_  
W. Pri. \_\_\_\_\_ Sec. \_\_\_\_\_  
2nd \_\_\_\_\_ 3rd \_\_\_\_\_  
e Rec'd 10.25.89 Int. PH  
= parts per million, milligrams per liter  
= Standard Units

873

NEVADA STATE HEALTH LABORATORY  
NEVADA DIVISION OF HEALTH  
1660 N. Virginia Street  
Reno, Nevada 89503  
(702) 688-1335

100873

WATER CHEMISTRY ANALYSIS:

Attn: Fees may apply to some types of samples.

TYPE OF ANALYSIS:

- ☒ Check here for ROUTINE DOMESTIC ANALYSIS.  
Circle the constituents needed for PARTIAL ANALYSIS.

SAMPLING INSTRUCTIONS:

The sample submitted must be representative of the source. Spring and surface water samples should be as free of dirt and debris as possible. Wells should be pumped thoroughly before sampling, changing the water in the casing at least three times. Product water from filters should be sampled after running for about ten (10) minutes.

Sampled by Louis Rossi Date 12-7-92  
Owner SPPLO Phone \_\_\_\_\_  
Address P.O. Box 10100  
City Reno N.V. State 89520

REPORT TO:

Name SPPLO & WCHD  
Address \_\_\_\_\_  
City \_\_\_\_\_  
State \_\_\_\_\_ Zip \_\_\_\_\_

All of the information below must be filled in  
or the analysis will not be performed.

State N.V. County Washoe  
Township 19 Range 20 Section 30  
General Location Peckham LN at Model Way  
Source Address Peckham Well

REASON FOR ANALYSIS:

- ☐ Loan  
☐ Personal health reasons  
☐ Purchase of the property  
☐ Rental or sale of property  
☐ Subdivision approval  
☒ Other SDWA

USE OF WATER:

- ☒ Domestic drinking water  
☐ Geothermal  
☐ Industrial or mining  
☐ Irrigation  
☐ Other \_\_\_\_\_  
Initials \_\_\_\_\_

SOURCE OF WATER:

Filter ☐ Yes ☐ No  
Public ☒ Yes ☐ No  
Spring \_\_\_\_\_  
Well ☒ Depth 82 1/2 ft.  
Hot \_\_\_\_\_ Cold ☒  
IN USE ☒ Yes ☐ No  
Type \_\_\_\_\_  
Name \_\_\_\_\_  
Surface \_\_\_\_\_  
Casing diameter 18 in.  
Casing depth \_\_\_\_\_ ft.

The results below are representative only of the sample submitted to this laboratory.

FOR LABORATORY USE ONLY

| Constituent      | ppm | Constituent | ppm   | Constituent | ppm  | Constituent | ppm  | Constituent | ppm     | Constituent | ppm | Constituent | ppm |
|------------------|-----|-------------|-------|-------------|------|-------------|------|-------------|---------|-------------|-----|-------------|-----|
| T.D.S. @ 103° C. | 315 | Chloride    | 6     | Iron        | 0.00 | Color       | 3    | Cadmium     | <0.001  |             |     |             |     |
| Hardness         | 75  | Nitrate -N  | 0.2   | Manganese   | 0.04 | Turbidity   | 0.4  | Chromium    | <0.005  |             |     |             |     |
| Calcium          | 20  | Alkalinity  | 136   | Copper      | 0.00 | pH          | 8.10 | Mercury     | <0.0005 |             |     |             |     |
| Magnesium        | 6   | Bicarbonate | 166   | Zinc        | 0.00 | EC          | 414  | Selenium    | <0.001  |             |     |             |     |
| Sodium           | 60  | Carbonate   | 0     | Barium      | 0.09 |             |      |             |         |             |     |             |     |
| Potassium        | 6   | Fluoride    | 0.80  | Boron       | 0.3  |             |      |             |         |             |     |             |     |
| Sulfate          | 67  | Arsenic     | 0.048 | Silica      | 75   |             |      |             |         |             |     |             |     |
|                  |     |             |       | MBAS        | <0.1 |             |      |             |         |             |     |             |     |

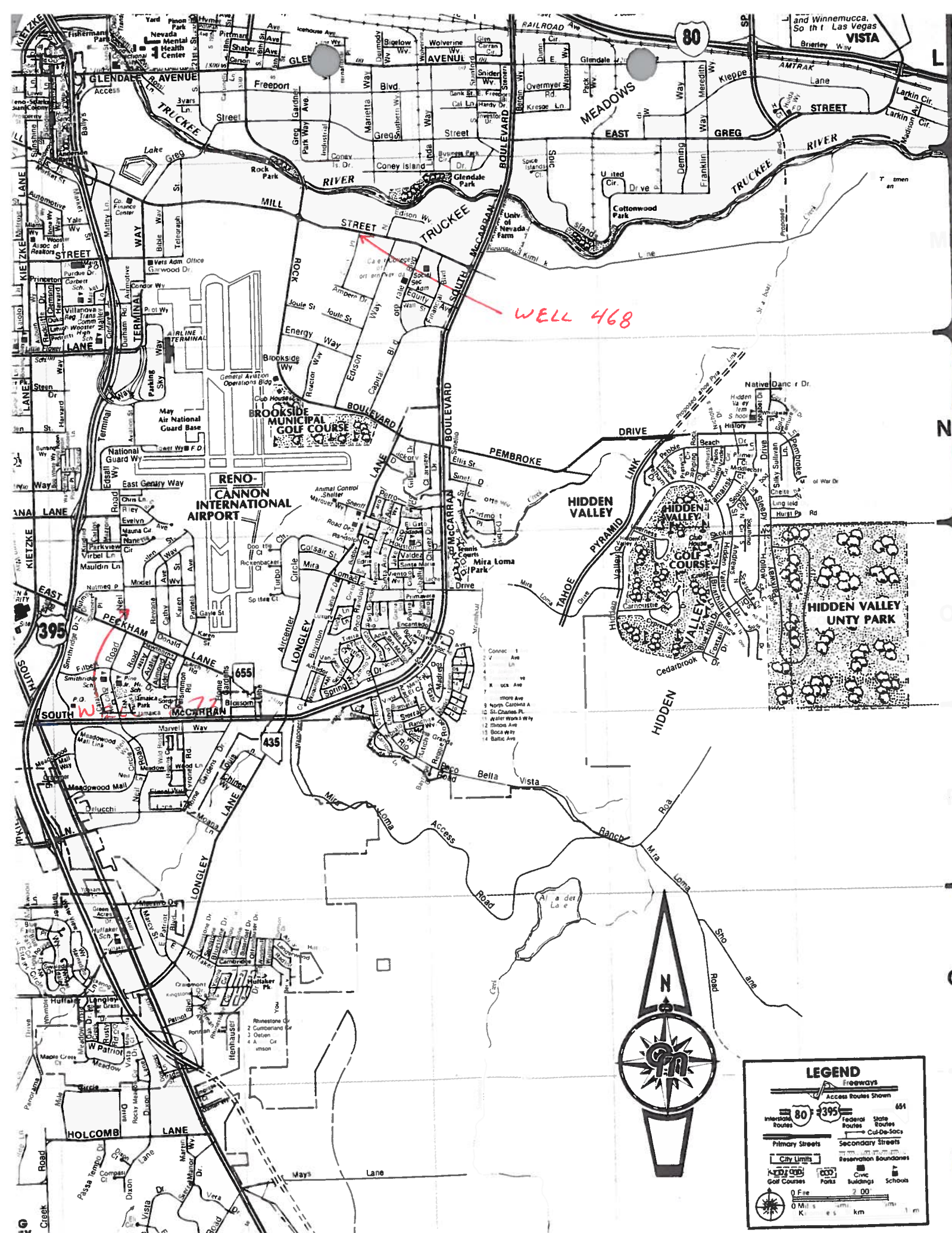
PRINT OTHER DESIRED  
CONSTITUENTS BELOW

Cadmium <0.001  
Chromium <0.005  
Mercury <0.0005  
Selenium <0.001  
01/12/93

Remarks

12/7/92  
1343  
SAC KR ✓  
T ✓ Eng  
01/07/93

Collected by \_\_\_\_\_  
S.I.D. \_\_\_\_\_  
WA—Pri. \_\_\_\_\_ Sec. \_\_\_\_\_  
2nd \_\_\_\_\_ 3rd \_\_\_\_\_  
Rec'd 12/7/92 Init. PH  
= parts per million, milligrams per liter  
= Standard Units



**LEGEND**

**Freeways**  
Access Routes Shown

**80** **395** **651**

**Primary Streets**  
City Limits

**Secondary Streets**  
Reservation Boundaries

**Other Features:**  
Federal Routes  
State Routes  
Civic Buildings  
Parks  
Schools

**Scale:**  
0 1 2 Miles  
0 1 2 Kilometers